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Economic and Systematic Botany

PLANT IMMIGRANTS

Issued monthly by the Office of Foreign Seed and Plant Introduction, Bureau of Plant Industry, Department of Agriculture.

No. 92. December, 1913.

Genera Represented in This Number.

Aleurites	36897	Cotoneaster	36738-740
Allium	36811-812	Diospyros	36808
Amygdalus	36724	Dodonaea	36813
Artemisia	36797	Eugenia	36713
Brassica	36770	Mangifera	36841
Calligonum	36536-540	Medicago	36784
Capsicum	36774-777	Myrciaria	36702
Carapa	36715		36709
Castanea	36666		36888
Cocos	36927	Phoenix	36818-828
Corylus 36726			

PLATES: Myrciaria cauliflora. The jaboticaba.

(NOTE: Applications for material listed in this bulletin may be made at any time to this Office. As they are received they are filed, and when the material is ready for the use of experimenters it is sent to those on the list of applicants who can show that they are prepared to care for it, as well as to others selected because of their special fitness to experiment with the particular plants imported.

One of the main objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant experimenters, and it will undertake as far as possible to fill any specific requests for foreign seeds or plants from plant breeders or others interested.)

Aleurit s montana. (Euphorbiaceae.) 36897. Seeds of Chinese wood oil from Hongkong, China. Presented by Mr. W. J. Tutcher, Superintendent, Botanical and Forestry Department, Hongkong. "The three species of Aleurites, *A. fordii* Hemsley, *A. montana* Wilson, and *A. cordata* R. Brown, from very early times have been almost hopelessly confused. As a cultivated tree *A. montana* occurs in the sub-tropical parts of southeastern China from the province of Fokien southward to Tonking, and is also undoubtedly a native of these regions. It requires, without question, a sub-tropical climate and a more abundant rainfall than its more northern relative, *A. fordii*. In all probability the tree is monoecious; as in other species of the family, but with a strong tendency to have the male and female flowers collected in different inflorescences of the same tree. The mu-yu tree (as *A. montana* is called by the natives in distinction from the tung-yu, *A. fordii*) in size, habit, foliage and general appearance (but not in its flowers and fruits) closely resembles the tung-yu. The flowers are borne in a terminal corymb or a raceme on shoots of the current season's growth after the leaves have fully expanded. The 'male' inflorescence is many-flowered, much-branched, corymbose, 15-20 cm. long, and 20-30 cm. (1 cm. equals 0.3937 inches) broad. The 'female' inflorescence is relatively few-flowered, racemose, and 8-12 cm. long. The fruit is markedly distinct, being egg-shaped, 5-6 cm. long, 4-4½ cm. wide, pointed at the summit and flattened at the base, with three longitudinal and many transverse, much-raised ridges; the interior part of the fruit is thick and woody and encloses (usually) three compressed, broadly obovoid seeds, each about 3 cm. long by 2½ cm. broad, and warty on the outside. When ripe the fruit opens from the base upwards into three parts and the seeds can then be readily extracted. Since the fruit is comparatively thick and quite woody it is not easily rotted by fermentation, as is the case in that of the tung-yu tree." (Wilson, Bull. Imperial Institute, September,1913.) For distribution later.

"The success of several preliminary experiments with *Aleurites fordii* in this country gives to this more southern species, from whose nuts a wood-oil is also extracted, a special interest." (Fairchild.)

Allium cepa. (Liliaceae.) 36811-812. Onion seeds from Merowe, northern Amalad Amer Island, Sudan. Collected by Mr. S. C. Mason, of this Bureau. Red and white varieties of Dongola onions. "These onions which were taken from the ground in May and early June (our Sacaton and Texas dates of harvest) are now (September 21, 1913) about as hard as baseballs. They are not 'wild' by any means, and an onion with such keeping qualities in this intense heat is surely a find. These people sow the seed in beds in Octo-

ber and November and transplant to the growing beds in February. I think the Imperial Valley, Yuma and Indio would be the correct places to try out this seed." (Mason.) For distribution later.

Amygdalus persica. (Amygdalaceae.) 36724. Seeds of a peach from Kalgan, China. "A small, but hardy peach, cultivated in sheltered localities in the northern parts of Chili province. To be tested in the regions north of the peach-belt proper." (Meyer's introduction.) For distribution later.

Artemisia sp. (Asteraceae.) 36797. Seeds of a wormwood from Peking, China. "A biennial wormwood occurring as a weed on all sorts of dry, waste places. The Chinese utilize this plant as a stock to graft chrysanthemums upon and claim that 'mums' thus grafted are earlier, need less water and no manure, are more easily lifted and transplanted and in general require far less care, than when on their own roots. To obtain the best results the Chinese sow the seed in late summer, in well drained beds. The seeds germinate quickly, but the little plants make but very small growth during the autumn and winter. When spring is there, however, they develop with great vigor and in June they have well-formed stems. Now the Chinese cut off the main stem an inch or so from the ground and graft a chrysanthemum scion upon it by the ordinary cleft-graft method; no wax is used, but only a small strip of fiber, while the plants are shaded during the first days. The stock and the scion soon unite and continue to grow vigorously. On very strongly developed specimens of the stock, the main branches are often used to insert on every one a different variety of chrysanthemum or to train a beautiful 'standard' tree of it and some of such specimens are fully as good as the plants seen at home exhibitions of 'mums.' The above described method of grafting chrysanthemums might prove to be valuable for the sections of the United States where the summers are somewhat too short or the nights too cool, to rear the plants successfully out of doors, as for instance in the more elevated parts of the Rocky Mountain States. N. B. Care has to be taken in watering the plants sparingly when lifted and planted in flower pots." (Meyer's introduction.) For distribution later.

Brassica oleracea caulo-rapa. (Brassicaceae.) 36770. Seeds of a kohl-rabi from Kalgan, China. "A very large variety of kohlrabi, which weighed when fresh 16 pounds.

This variety of kohlrabi thrives especially well in the vicinity of Kalgan where occasionally specimens are obtained weighing up to 25 pounds." (Meyer's introduction.) For distribution later.

Calligonum spp. (Polygonaceae.) 36536-540. Seeds from the Imperial Botanic Garden, St. Petersburg, Russia. Presented by Mr. Raphael Zon, Forest Service. Five species of this interesting group, some of which may have value as sand-binders, for which purpose they are being tried in the Trans-Caspian region. For distribution later.

Capsicum annuum. (Brassicaceae.) 36774-777. Seeds of red peppers from Kalgan, China. Four varieties, some of which may prove of value in alkaline soil in semi-arid regions. For distribution later.

Carapa guianensis. (Meliaceae.) 36715. Seeds of the *andiroba* from Rio de Janeiro. "An Amazonian tree belonging to the Meliaceae, used to good effect in the Rio Botanic Garden as an avenue tree. It grows to a height of 50 feet or thereabouts, and has compound leaves 1½ feet in length, the individual leaflets 3 or 4 inches long, obtuse, dark green in color. The fruits are the size of a baseball, russet brown and rough on the exterior, thick-shelled, dividing into four sections when ripe and exposing the large brown seeds, somewhat similar in shape and appearance to chestnuts. Should be tried as an ornamental tree in southern Florida and southern California." (Dorsett, Popenoe and Shamel introduction.) For distribution later.

Castanea sp. (Fagaceae.) 36666. Chestnuts from Peking, China. "Chinese chestnuts, said to come from the Pang Shan region to the northeast of Pekin. This North China chestnut has no value as a lumber tree, being of a low-branching open-headed growth while the trees do not grow tall, specimens over 40 feet in height being rare. It seems however much more resistant to the bark fungus disease than the American chestnut and it might be utilized in certain hybridization experiments trying to combine the good qualities of both the American and the Chinese parents into one tree. This chestnut loves a well drained, decomposed granite soil, preferably at the foot of hills or mountains; it also seems quite averse to strong winds and thrives best in well sheltered valleys. In its native localities it is but little cultivated, the peasants being content to plant a few trees here and there along the bases of hills and on sloping fields and the trees in general look much thriftier when close to rocks and boulders than when seen on fairly level fields. From

the nature of the tree and the climate where it grows, one might conclude that sheltered valleys in the foothill sections of the Rocky Mountain regions will probably suit this chestnut better than any other section in the United States and some serious attempts should be made to establish it in these regions as a hardy nut bearing tree." (Meyer's introduction.) For distribution later.

Cocos coronata. (Phoenicaceae.) 36927. Seeds of the nicuri palm from Bahia, Brazil. "A species common in the region around the city of Bahia. It grows to a height of 20 or 30 feet, and is usually somewhat scraggly in appearance, on account of the leaves being whipped and torn by the wind. The old leaf bases usually adhere to the trunk, and are arranged spirally, giving a curious twisted appearance to the palm. The leaves are glaucous, and when well grown are very graceful, though not as feathery as *Cocos plumosa* and others of that type. In the interior of Bahia this palm is very abundant, according to Dr. Argollo Ferrao, and goats feed on the fruits. The hard pericarp of the seed encloses a kernel which is fed to chickens, and is sometimes eaten by the people themselves. The leaves are used as thatch, for making brooms, carpets and hats; the nicuri hat is commonly worn by the natives in the rural districts around Bahia, and is sold in the markets for from two or three hundred reis to one milreis (11 to 54 cents) each, according to quality. The plant is of very slow growth." (Dorsett, Popenoe and Shamel introduction.) For distribution later.

Corylus spp. (Fagaceae.) 36726-727. Seeds of a hazelnut from the Hsiao Wu tai shan mountains, west of Peking, China. Two species of hazelnuts, one of good quality, which with a large number of other shrubs and trees were collected in the little known mountains called Hsiao Wu tai shan. Altogether more than eighty species of shrubs and trees were obtained in August, 1913. (Meyer's introduction.) For distribution later.

Cotoneaster spp. (Malaceae.) 36738-740. Seeds of three species of cotoneaster, all of them tall, and of considerable ornamental value, from the same location as the *Corylus spp*. (Meyer's introduction.) For distribution later.

Diospyrus lotus. (Ebenaceae.) 36808. Seeds of the wild persimmon from Pekin, China. "Two thousand seeds of the wild persimmons, especially for the drier parts of the United States." (Meyer's introduction.) For distribution later.

Dodonaea viscosa. (Sapindaceae.) 36813. Seeds from Merowe, Sudan. Presented by Mr. S. C. Mason, of this Bureau. "A very interesting hedge plant which is beautifully dense and green, and responds to the shears perfectly and when taken in hand early makes a perfectly compact wall clear to the ground. Found at Erkowit near Suakin, which is the hill station in Sudan. The shrub is called *Tattas* by the natives. The governor who presented it to me is not sure whether it will endure any frost but thinks it may. The seedling plants form a rather deep tap root and must be transplanted with some care on that account." (Mason.) For distribution later.

Eugenia tomentosa. (Myrtaceae.) 36713. Seeds of the cabelluda from Rio de Janeiro. "This myrtaceous fruit, although a native of the state of Rio de Janeiro, is not commonly cultivated in gardens around the city, so far as we have seen. While an occasional tree is seen here and there, it cannot compare with the jaboticaba or the pitanga, two allied fruits also native of this region. When well grown the tree is very handsome, and would be of value as an ornamental alone. It reaches a height of twenty to thirty feet, with a broad, dome-shaped head of foliage. The leaves are two to four inches in length and about one inch in breadth, oblong-lanceolate, bright green and slightly tomentose below.

"The name cabelluda is the feminine of the Portuguese adjective *cabelludo*, meaning "Hairy", and has reference to the downy tomentum present both on the leaves and the fruits. The tree flowers in June, and the fruits, which ripen in October and November, are sessile and produced on the small branches in great profusion. In general appearance the fruit somewhat resembles a gooseberry, but when fully ripe it is golden yellow in color, although still retaining an indistinct ribbing under the skin which suggests the gooseberry. The largest specimens are slightly under one inch in diameter, round or nearly so, the skin firm and thick. To eat the fruit one merely places it against his lips, squeezes it until the skin breaks and the seeds with the pulp surrounding them slides into his mouth. The pulp is rather scanty, but is juicy and of pleasant flavor, similar to the mandrake or maypop of the United States. The large seeds are surrounded with short, coarse fibers something on the order of the fibers surrounding the mango seed.

"The cabelluda is said to be tender and suitable only for culture in tropical countries, but it may prove to be adapted to south Florida and possibly to southern California as well. Both on account of its value as a fruit and its ornamental appearance it should be given a thorough trial in these regions.

"A pomological description of the fruit, as seen in various gardens around Rio de Janeiro, follows:

"General form round or slightly oblate; cross section round; dimensions, length about three-fourths inch, width about three-fourths inch; base rounded; apex rounded, crowned by a small disk; surface smooth, downy, color golden yellow with faint longitudinal lines under the skin giving a ribbed appearance; skin thick and very tough, separating readily from the pulp, rather acrid in taste; pulp translucent, yellowish-white, aromatic, juicy, scanty in quantity; flavor subacid, suggesting the mandrake, agreeable when fully ripe; seeds one to two, surrounded by short fibers, elliptical to oval in form, slightly compressed, about three-eighths inch in length." (Dorsett, Popenoe and Shamel introduction.) For distribution later.

Mangifera indica. (Anacardiaceae.) 36841. Budwood of the Manga da Rosa or rose mango from Bahia, Brazil. "Manga da Rosa is one of the commonest named varieties of the mango, both here and at Rio de Janeiro. The name seems to be applied to seedling trees in many cases; on investigation we find that the seed is polyembryonic, which leads to the belief that the variety may in reality be a seedling race or type, like the No. 11 of the West Indies and Florida, and like this race maintains its characteristics even when grown from seed. The fruits of this variety are of good size and ripen here in December and January. At the present time (November 20) they are almost full grown. The form is somewhat similar to that of the No. 11 mango, broad at the base, with the stem inserted to one side, making the left shoulder full and high, while the right shoulder is falling. The apex is rather pointed, with a rather prominent beak about one-half inch above the longitudinal center of the fruit. Both cheeks are distinctly compressed, and are overspread with rich rose red, a very attractive and striking color. The seed is medium in size, and those we have examined contained from 5 to 8 embryos. The flavor and quality are said to be very good, and the trees seem to be carrying better crops of fruit than in the case of other varieties. This mango should be given a thorough trial in Florida, both to determine its value as a fruit, and to throw more light on the fruiting habits of the polembryonic mangos, which seem to be an especially promising class." (Dorsett, Popenoe and Shamel introduction.) For distribution later.

Medicago ruthenica. (Fabaceae.) 36784. Seeds of a wild alfalfa from near Tau hwa, Chili province, China. "A wild alfalfa, of spreading and semi-ascending growth; found on all sorts of open places. Flowers of dark yellowish color, pods short and flat, borne in little clusters,

springing open and scattering their seeds when ripe. On very dry and exposed places the plants make but small growth, but where found on moister places and between grasses, they supply quite a mass of herbage, which is eagerly eaten by all grazing animals. This alfalfa is found at elevations from 2000 to 8000 feet, making a much more abundant growth in the higher mountain regions than on the lower plains. Of decided value as a forage plant on ranges and grazing grounds. Might be found valuable enough even to be grown in congenial localities for hay and for green fodder." (Meyer's introduction.) For distribution later.

Myrciaria cauliflora. (Myrtaceae.) 36702, 36709, 36888, Seeds of the jaboticaba from Rio de Janeiro, Brazil. "Among the fruit trees cultivated in gardens about Rio de Janeiro the Jaboticaba is one of the commonest, and certainly one of the most beautiful. The largest trees are thirty to forty feet in height and fully forty feet in spread, with dense, umbrageous, dome-shaped heads of light green foliage. The individual leaves vary in size according to the variety, some being three inches in length while others are not more than two, oblong-lanceolate in form, glossy, light green in color, usually pink in the young stage. The trunk of the tree is oftentimes very large, one specimen that we measured being 80 inches in circumference at the base, and usually branches close to the ground. The bark is smooth, grayish-brown in color, reminding one of the bark of the guava and other myrtaceous fruits.

"The name jaboticaba is a Tupi word, spelled by some authorities *jabuticaba;* this name is applied only to the fruit, the suffix 'eira' being added to signify the tree, making the word 'jaboticabeira', or jaboticaba-tree. The name is usually pronounced here at Rio as though spelled ja-bu-ti-ca-ba, with accent on the fourth syllable.

"The tree flowers in May and June, and the fruit ripens in October and November. As signified by the specific name, *cauliflora,* the fruits are produced on the old wood, and we have seen many trees whose trunks were literally covered with fruits down to within two or three feet of the ground. The fruiting is not confined, however, to the large wood, but extends clear out to the ends of the smallest branches; the fruits are sessile or nearly so, and a tree covered with them from the ground to the ends of the small limbs presents a rather unusual appearance, to say the least.

"Four varieties are offered by the nurserymen here, but do not seem to be recognized by the people in the rural districts. They come from different parts of Brazil,

and probably not more than one or two of them are in general cultivation here. Since they are supposed to come true from seed, it is quite possible that one or more of them may be entirely different species. Their names are *Sao Paulo*, *Murta*, *Coroa*, and *Branco*; the variety *Sao Paulo* may be *Myrciaria jaboticaba* Berg, which according to Barbosa Rodrigues is commonly known as *Jaboticaba de Sao Paulo*. Its foliage is much larger than the common jaboticaba which grows around Rio. *Murta* is said to be a large fruited variety, but we have seen only young plants of it. *Coroa* we saw in fruit at a local nursery, and it seems to be the common local variety, which is described further on. *Branca* ('White') is a little known variety, small-fruited.

"The fruits seen in the markets here vary greatly in size, but otherwise seem to be alike. A good specimen is an inch and a half in diameter, round or nearly so, and dark maroon-purple in color, greatly resembling in appearance some of the grapes of the *rotundifolia* type. This resemblance extends to the internal characteristics of the fruit as well, the texture of the flesh, its color and flavor, as well as the seeds, suggesting a grape more than any other temperate fruit. The skin is thick and very tough; it is broken by squeezing the fruit with the thumb and first finger, when the pulp slides out into the mouth and the skin is discarded. The pulp is translucent, very juicy, and of a subacid, pleasant flavor, with a rather peculiar 'twang' which one is not sure to like at first, but which is very agreeable as soon as one becomes accustomed to it. The seeds, one to four in number, are rather large and adhere closely to the pulp; the boys here seem to swallow them, but this may not be a very desirable proceeding from a physiological standpoint. The Brazilians seem almost passionately fond of this fruit, especially the children, who spend hours at a time under the trees hunting for the ripe fruits and then working them off with a long pole, if they are where they cannot be reached.

"Following is a pomological description of the fruit, as purchased in the Rio de Janeiro market, and seen growing in gardens around the city:

"General form slightly oblate to very broadly pyriform, with a majority of specimens round or very nearly so; cross section regularly round; dimensions, length three-fourths to one and one-half inches, breadth three-fourths to one and five-eighths inches; base of fruit in some cases slightly extended, in others slightly flattened; apex usually slightly flattened with a small disk and vestiges of the four sepals; surface smooth, somewhat glossy to very glossy, color purplish-maroon to maroon-purple when fully ripe; skin one-sixteenth inch thick,

tough and leathery and not easily broken, but separating readily from the flesh, which comes out in a body when the skin is broken; flesh translucent, whitish, jelly-like in consistency, full of juice; flavor vinous, with a peculiar twang of its own; seeds normally four, but one to three sometimes abortive. Three seems to be the commonest number, but two is also common, and a few have been seen with five. Shape oval to almost round, flattened laterally, three-eighths to one-half inch long, one-eighth thick; seed coats very thin.

"Practically no cultivation has been given the trees we have seen, and we have heard of no other way of propagating than by seed." (Dorsett, Popenoe and Shamel introduction.) For distribution later.

Phoenix dactylifera. (Phoenicaceae.) 36818-825. Offshoots of the Bent Mooda date from Dongola, Sudan. Collected by Mr. S. C. Mason, of this Bureau. "The find which is worth the whole journey is the Bent Mooda, a Succotha variety which is very rare. A man of consequence may have two or three trees. The gift of an offshoot to a friend is a mark of distinction. I was at once told both by Gov. Jackson and his head man that one could not go out and buy a stock of these. I really think the Bent Mooda variety ranks with the Deglet Noor and Menakher. The stone is small and clean and it has the appearance and flavor to give it a place in the first rank." (Mason.) For distribution later.

Phoenix dactylifera. (Phoenicaceae.) 36826. Offshoot of the Berakwy date from Dongola, Sudan. "*Berakwy* is the great food staple and export date and is said to reach Cairo under the name *Ibrimu*, though there may be a distinct variety of that name. It is 2½ inches long or longer, narrow, tapering from base to apex; dull purplish red, drying bone hard but sweet and of a wheaty flavor, said to resist the weevil and to keep two or three years. The people say that these dates put in a tightly closed vessel of water for a day or two becomes as good as fresh dates and the water makes a very pleasant drink." (Mason.) For distribution later.

Phoenix dactylifera. (Phoenicaceae.) 36827. Offshoot of the Gundala date from Dongola, Sudan. "The Gundala (as these people have it), or Jendila, is an oblong or oval, blocky date, 'antimony yellow', ripening to a 'chestnut brown'. It is a 'semi-dry' date as it ripens but exposed to the sun two hours each day it is made quite dry, but has to be carefully guarded against weevils. It only reaches Cairo by special orders or as presents. It is one

of the varieties they offer to guests as a sweet. When sold an ardeb of 320 lbs. brings here about 154 piasters (a piaster is about 5 cents). This variety is worth importing and is common enough that a fair supply can probably be obtained. (Mason.) For distribution later.

NOTES FROM CORRESPONDENTS ABROAD.

Mr. F. W. Popenoe writes from Rio de Janeiro, Brazil, January 4, 1914. "I have just returned from a visit to the Jardim Botanico, where I called on Dr. Willis and Alberto Löfgren. Mr. Löfgren spoke of you, and wished me to remember him to you. He took great interest in our expedition, giving us cards to some parties in Sao Paulo, and offering to be of assistance at any time desired. Dr. Willis says he is the best botanist in Brazil, as far as a knowledge of the Brazilian flora is concerned. He has recently left the Obras Contra as Seccas and come into *the Jardim Botanico, to have charge of one branch of the work, and should be addressed there.*

"We have seen and sampled most of the important Brazilian mangos, and I regret to say that they are, on the whole, disappointing. Manga da Rosa is as beautiful a fruit as one could desire, and an excellent shipper, but it does not rank high enough in quality to place it alongside of any of the good Indian varieties. Itamaracá is the best in flavor of any I have eaten, and is said to be one of the very best here. The others are too fibrous to be worth while, so far as we have seen. I was in hopes we might find something really excellent here, but I begin to despair of finding as good mangos in Brazil as we can get elsewhere. I believe I wrote you that Dr. Willis spoke of a very fine mango grown in this state; I asked him about it further, and he was unable to give me directions for finding it, the owner of the place being in Europe at the present time.

"There seems to be almost no end to the interesting myrtaceous fruits of this country. We are running across new ones all the time. We have good photos of most of them, and descriptions of the fruit and tree. In writing up our inventory notes on some of these things, I do not have time to write out a complete description of the plant, such as I would like to do. When we return, however, we can get up the data for publication in the inventory in more complete and readible form, if it is desired. We usually have to get our stuff packed at the last moment, and write up the notes rather hurriedly.

"Löfgren tells us of a Malvaceous fiber plant along the Rio Sao Francisco which he thinks may be of considerable value. The caroá (Neoglaziovia) is also well worthy

of careful investigation, he says, and is used extensively by the Indians. They used to bring small hammocks made of caroá around to the houses in Bahia, and offer them at two or three milreis each. We hope to investigate these two plants as thoroughly as possible.

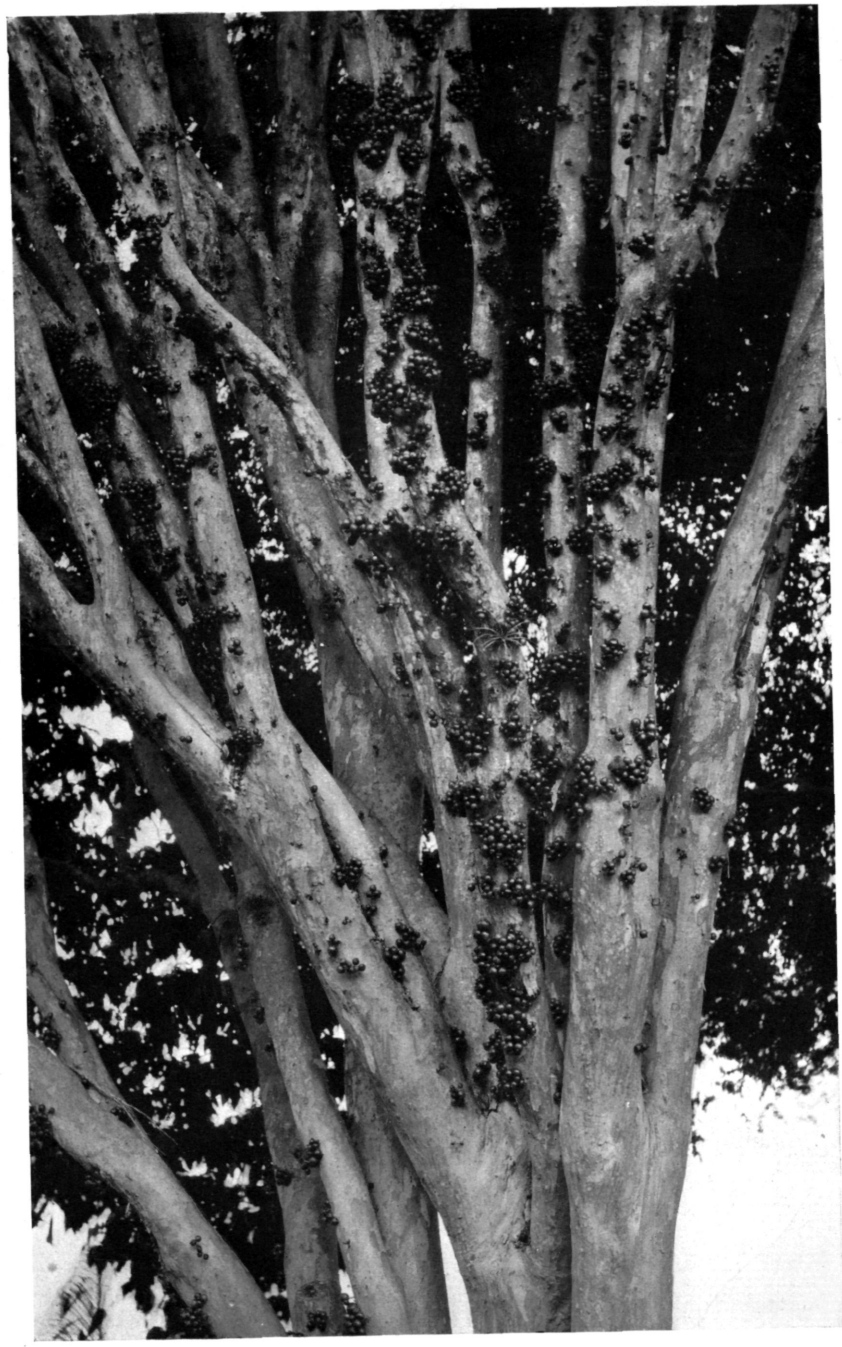
"The most striking thing about Rio just now is the heat. Dr. Willis says it is cooler in the interior, and we are fervently hoping he is right. We leave day after tomorrow for Lavras; it is a two days run, stopping over night at Sao Joao del Rey. Our only regret is that our time is going to be so short for this interior trip. We have cut down our equipment to the essentials, made a few purchases here in Rio, including an abundant supply of mosquito netting, and are, I believe, in good shape to tackle rough country. It will probably be smooth sailing until we leave Pirapora, but from there on, unless all the reports we have received are false, we can expect to have jerked beef and feijoada on our menu pretty frequently.

"Several Guttiferae which are grown here seem to me to be well worthy of careful attention. We have only been able to examine the fruits of one, *Rheedia brasiliensis*, but I was immediately struck by the resemblance of this fruit to the mangosteen, in flavor and character of flesh. It is smaller than a mangosteen, being about an inch and a quarter in diameter, oval, yellow in color, and containing three or four seeds surrounded by whitish, juicy pulp, of delightful flavor. It is just beginning to ripen at the Jardim Botanico and we are not able to get any seeds at this time, but no doubt Dr. Willis would be glad to supply them. We have photos of tree and fruit.

"Barbosa Rodrigues says Platonia insignis, whose fruits are very similar to Rheedia, is far superior in flavor, and if that is the case it is certainly worth getting. He says of it 'the fruits are large and the seeds are enveloped in a very aromatic, whitish pulp, of delicious taste. *Doce* (jams, jellies, and sweets of all kinds) made with the pulp of this fruit, is, when well made, a nectar.'"

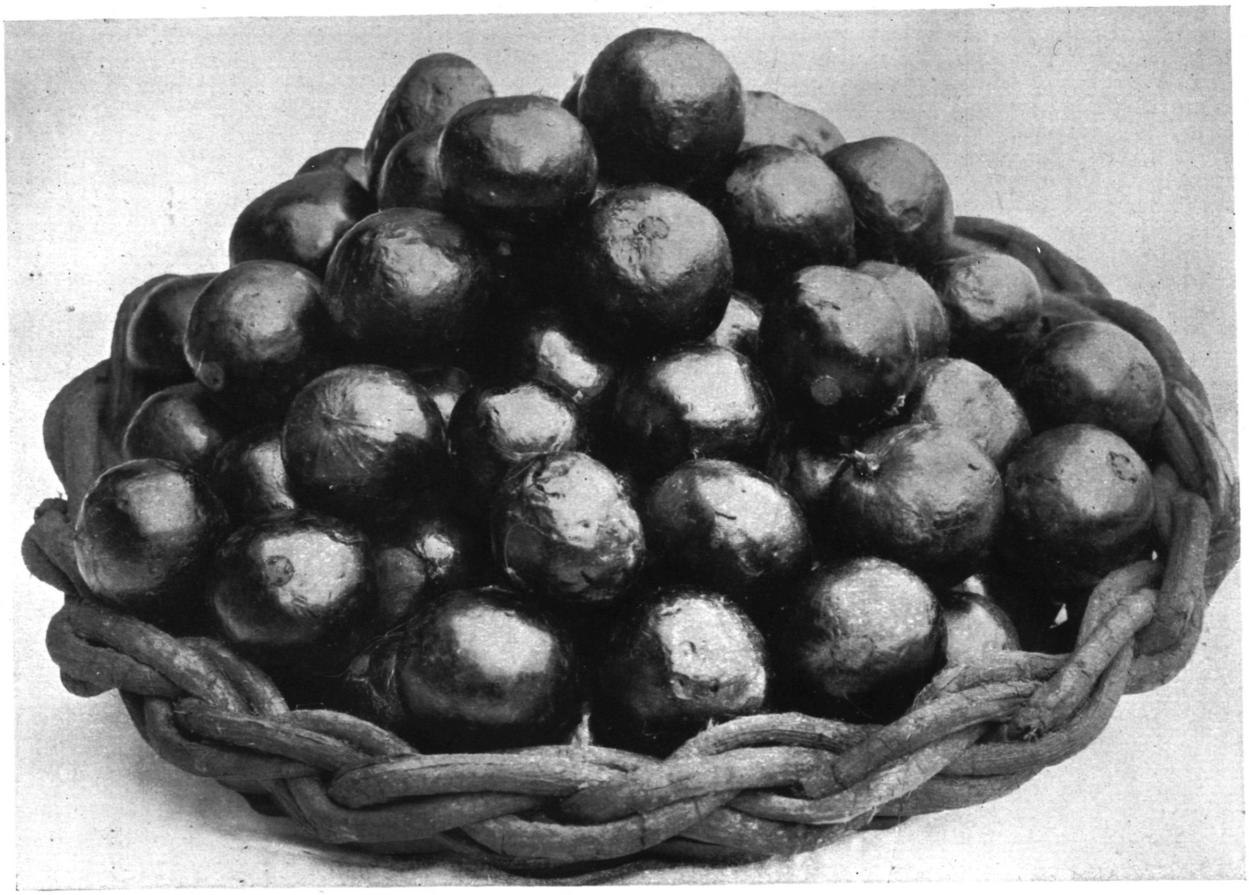
Myrciaria cauliflora. The jaboticaba of Brazil.

A large tree of the jaboticaba, pronounced as if spelled jabuticába, on the Catramby estate, near Rio de Janeiro. The tree is a slow grower but forms a beautiful shade tree and young specimens are now growing in southern California and southern Florida. It is not known yet how low temperatures it will withstand. It is one of the Myrtaceae, the order to which the guava and Feijoa belong.



Myrciaria cauliflora. The Jaboticaba of Brazil.

A close view of a jaboticaba tree showing the manner in which the fruits are clustered upon the trunk and branches (cauliflorous). The fruit clusters are frequently found down to within a few inches of the ground. Photographed by Mr. P. H. Dorsett, on the Catramby estate, Rio de Janeiro, October 28, 1913. For full description see p. 724-726, this bulletin.



Myrciaria cauliflora. The jaboticaba of Brazil.

A small market basket of jaboticabas, natural size, from the Rio de Janeiro markets. This fruit has become a favorite among Brazilians. The skin is tough like that of a Scuppernong grape and one eats the white fruit pulp much as one would a grape. It has its own distinctive flavor. Photographed by Mr. P. H. Dorsett, Rio de Janeiro, October 24, 1913. For full description see p. 724-726, this bulletin. This is one of at least two species of Myrciaria found in Brazil under the name jaboticaba.